STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
LOS ANGELES REGION
101 CENTRE PLAZA DRIVE
MONTEREY PARK, CA 91754-2156
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CLEANUP PLAN SITE ASSESSMENT-MONADNOCK FACILITY, CITY OF INDUSTRY (CAO 88-057)

The notes of our meeting on February 28, 1992, prepared by Mr. Steve Mulligan of IDEA and received on March 9, 1992, have been reviewed as has the cleanup plan presented on April 3, 1992. The following comments apply:

MEETING NOTES:

1. Although soil matrix samples from the southwest corner of the building, pavement line south of the building and in the southwest corner of the building, did not reveal concentrations greater than a few "tens of ug/kg, soil gas points indicate that some remaining concern. Although remediation has not been requested, at this area a final decision will await further review.

2. It is accurate to state that staff does not anticipate remediation of cyanide, chromium or cadmium impacted soils at this time. However analyses for these materials will be requested analyses for future groundwater monitoring in near-field downgradient wells. If additional data from soil or ground water reflects a residual threat, further remediation effort may be required.

3. There are essentially two saturated horizons above the Puente bedrock, which lies some 90 feet below ground surface (bgs). Staff agrees that the uppermost of these two units should be investigated further and the requirements for the second unit may be in part based upon these further results.

CLEANUP PLAN

IDEA must provide a **relatively** complete vapor extraction system (VES) cleanup plan. As presented, the workplan is merely framework for remediation with very little support detail.

The following general comments are provided so that a revised cleanup plan may be prepared:

1. A specific summary of previous investigation work covering the 5 cleanup targets areas must be included in the plan. In addition to meeting the needs of external review elements of the previous investigation have specific applicability, e.g. assessment of whether determination of lateral and vertical extent of contamination in the vadose zone is sufficiently delineated for the design and specific placement of VES and extraction wells(s).

2. Although some site specific physical tests are proposed for "soil" samples, others must be included as well. Discuss how these will be used in the remediation process and design engineering. Some form of "strippability" evaluation is needed.

3. The crucial issue of cleanup levels is not discussed. It is indicated that cleanup will depend solely upon soil matrix samples. The cleanup plan must provide a discussion of cleanup levels for all detected contaminants and propose appropriate means for their determination. These levels must be discussed in terms of both vapor and non-vapor phase contaminants.

4. The cleanup is relying upon pilot-testing to develop key elements of remediation. Appropriate details of this testing must be provided. Especially explain how results will be integrated into remediation, e.g. how blower and motor size will be selected "...pending results of pilot test..."

5. The general description of vapor extraction is appropriate. However, a discussion of applicability to the specific site contaminants and the various horizons within the vadose zone is necessary. Explain why "...compounds will be collected at the extraction well(s) and **discharge to the atmosphere** through the air emission control unit". These compounds are supposed to the trapped.

6. Only a brief outline of the proposed system has been provided. Additional details are required with respect to the extraction and treatment system elements. For example, at what point in the system does your consultant plan to obtain samples of the process stream?

7. Operation and maintenance are keys to achieving the described cleanup. No specifics have been provided.

8. In situ vapor distribution monitoring, during the operation of the system is a necessity, yet there is little or no discussion of it. Sufficient details of synchronous monitoring must be provided to allow evaluation. The pressure

monitoring indicated is not sufficient nor is the dependence on successive soil matrix sampling "events" over the time of VES operation. Explain how the pressure monitoring wells will be used to evaluate "soil gas flow pattern..." and "document" reduction if VOC concentrations are not measured. These measurements cannot merely be an afterthought. An appropriate array of monitoring probes must be provided as part of any cleanup plan.

9. No health and safety plan was included. The deficiency should be corrected.

10. Simply stating that your consultant will prepare necessary permit applications is not adequate. Describe how permits will affect scheduling.

11. There is no description of how field operations will be documented. Provide sufficient detail to convey that all operations and monitoring will be adequately documented.

12. The proposed post-remedial verification is inadequate. For example soil gas concentrations must be monitored and "rebound" phenomenon evaluated. The soil matrix sampling alone will not suffice.

13. Sampling protocols are not complete. For example, is your consultant planning to sample gas at the extraction well head and to monitor flow rates?

14. Analytical protocols are not provided. Utilize appropriate EPA and ASTM documentation to develop protocols and procedures. QA/QC procedures are absent and need to be included in the cleanup plan.

15. There is no mention of progress reporting. The schedule shows no progress reports. A final technical report is apparently planned. You must describe in the plan how you will monitor the requirement to update staff of this Regional Board as to cleanup progress.

GROUNDWATER

1. Staff is pleased that the "Phase 3" groundwater investigation program is proposed. However the specific elements are disappointing.

2. It is proposed to focus the effort only within the uppermost "...ground water zone..." on-site. An additional investigation is alluded to as possibly assessing the extent of VOC-impacted groundwater, both on-site and off-site.

3. The "...initial groundwater investigation..." offers to install two additional wells (a) one at the eastern fence line, and (b) one west of the property within the Fullerton Road right-of-way.

4. Existing wells on the site **imply** that Monadnock contaminants "have migrated off-site". Adequate stepout needs to be provided rather than this limited proposal. There are no objections to further upgradient wells(s), but a minimum of three additional off-site downgradient wells is necessary.

5. The well construction material must be upgraded from PVC slotted to stainless steel wire-wrap screen. Utilize a cement bentonite grout (check DWR guidelines). No mention is made of turbidity which is a key measure of the acceptability of VOC analyses. Provide an adequate description of proper design, construction, and development procedures. Sampling protocols are not described.

Staff is pleased with the ambitious schedule and scope of work suggested by TRW during our meeting. If you have any questions please contact me at (213) 266-7537.

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PBC:tlr

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